

# Search Report 10/694079

L10 ANSWER 1 OF 5 REGISTRY COPYRIGHT 2004 ACS on STN  
 RN 37145-46-3 REGISTRY  
 CN 1-Propene, pentafluoro- (9CI) (CA INDEX NAME)  
 OTHER CA INDEX NAMES:  
 CN Propene, pentafluoro- (6CI)  
 OTHER NAMES:  
 CN **Pentafluoropropene**  
 MF **C3 H F5**  
 CI IDS, COM  
 LC STN Files: CA, CAOLD, CAPLUS, CSNB, TOXCENTER, USPAT2, USPATFULL  
 DT.CA Caplus document type: Dissertation; Journal; Patent  
 RL.P Roles from patents: PREP (Preparation); PROC (Process); PRP (Properties); RACT (Reactant or reagent); USES (Uses); NORL (No role in record)  
 RLD.P Roles for non-specific derivatives from patents: BIOL (Biological study); PREP (Preparation); USES (Uses)  
 RL.NP Roles from non-patents: ANST (Analytical study); FORM (Formation, nonpreparative); PREP (Preparation); PROC (Process); RACT (Reactant or reagent); NORL (No role in record)

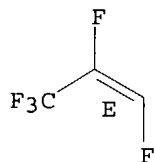


5 ( D1-F )

25 REFERENCES IN FILE CA (1907 TO DATE)  
 4 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA  
 25 REFERENCES IN FILE CAPLUS (1907 TO DATE)  
 1 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

L10 ANSWER 2 OF 5 REGISTRY COPYRIGHT 2004 ACS on STN  
 RN 5595-10-8 REGISTRY  
 CN 1-Propene, 1,2,3,3,3-pentafluoro-, (1E)- (9CI) (CA INDEX NAME)  
 OTHER CA INDEX NAMES:  
 CN 1-Propene, 1,2,3,3,3-pentafluoro-, (E)-  
 CN Propene, 1,2,3,3,3-pentafluoro-, (E)- (8CI)  
 OTHER NAMES:  
 CN **(E)-1,2,3,3,3-Pentafluoropropene**  
 FS STEREOSEARCH  
 MF **C3 H F5**  
 LC STN Files: BEILSTEIN\*, CA, CAOLD, CAPLUS, CASREACT, USPATFULL  
 (\*File contains numerically searchable property data)  
 DT.CA Caplus document type: Journal; Patent  
 RL.P Roles from patents: PREP (Preparation); PROC (Process); PRP (Properties); RACT (Reactant or reagent)  
 RL.NP Roles from non-patents: FORM (Formation, nonpreparative); PREP (Preparation); PROC (Process); PRP (Properties); RACT (Reactant or reagent); NORL (No role in record)  
 RLD.NP Roles for non-specific derivatives from non-patents: RACT (Reactant or reagent)

Double bond geometry as shown.

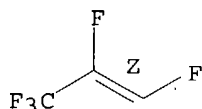


**\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\***

19 REFERENCES IN FILE CA (1907 TO DATE)  
1 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA  
19 REFERENCES IN FILE CAPLUS (1907 TO DATE)  
1 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

L10 ANSWER 3 OF 5 REGISTRY COPYRIGHT 2004 ACS on STN  
RN 5528-43-8 REGISTRY  
CN 1-Propene, 1,2,3,3,3-pentafluoro-, (1Z)- (9CI) (CA INDEX NAME)  
OTHER CA INDEX NAMES:  
CN 1-Propene, 1,2,3,3,3-pentafluoro-, (Z)-  
CN Propene, 1,2,3,3,3-pentafluoro-, (Z)- (8CI)  
OTHER NAMES:  
CN **(Z)-1,2,3,3,3-Pentafluoropropene**  
FS STEREOSEARCH  
MF **C3 H F5**  
CI COM  
LC STN Files: BEILSTEIN\*, CA, CAOLD, CAPLUS, CASREACT, CHEMLIST, USPATFULL  
(\*File contains numerically searchable property data)  
Other Sources: EINECS\*\*  
(\*Enter CHEMLIST File for up-to-date regulatory information)  
DT.CA Caplus document type: Journal; Patent  
RL.P Roles from patents: PREP (Preparation); PROC (Process); PRP  
(Properties); RACT (Reactant or reagent)  
RL.NP Roles from non-patents: PREP (Preparation); PROC (Process); PRP  
(Properties); RACT (Reactant or reagent); NORL (No role in record)  
RLD.NP Roles for non-specific derivatives from non-patents: RACT (Reactant or  
reagent)

Double bond geometry as shown.

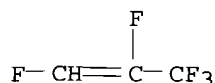


**\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\***

13 REFERENCES IN FILE CA (1907 TO DATE)  
1 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA  
13 REFERENCES IN FILE CAPLUS (1907 TO DATE)  
1 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

L10 ANSWER 4 OF 5 REGISTRY COPYRIGHT 2004 ACS on STN  
RN 2252-83-7 REGISTRY  
CN 1-Propene, 1,2,3,3,3-pentafluoro- (9CI) (CA INDEX NAME)  
OTHER CA INDEX NAMES:  
CN Propene, 1,2,3,3,3-pentafluoro- (6CI, 7CI, 8CI)  
OTHER NAMES:  
CN **1,1,1,2,3-Pentafluoropropene**  
CN **1,2,3,3,3-Pentafluoropropene**  
CN **1H-Pentafluoropropene**  
MF **C3 H F5**  
CI COM  
LC STN Files: BEILSTEIN\*, CA, CAOLD, CAPLUS, CASREACT, CHEMCATS, IFICDB,  
IFIUDB, TOXCENTER, USPAT2, USPATFULL  
(\*File contains numerically searchable property data)  
DT.CA Caplus document type: Journal; Patent  
RL.P Roles from patents: FORM (Formation, nonpreparative); PREP  
(Preparation); PRP (Properties); RACT (Reactant or reagent); USES (Uses)

RL.NP Roles from non-patents: FORM (Formation, nonpreparative); PREP (Preparation); PRP (Properties); RACT (Reactant or reagent); NORL (No role in record)



**\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\***

25 REFERENCES IN FILE CA (1907 TO DATE)  
25 REFERENCES IN FILE CAPLUS (1907 TO DATE)  
7 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

L10 ANSWER 5 OF 5 REGISTRY COPYRIGHT 2004 ACS on STN  
RN 690-27-7 REGISTRY  
CN 1-Propene, 1,1,3,3,3-pentafluoro- (9CI) (CA INDEX NAME)  
OTHER CA INDEX NAMES:  
CN Propene, 1,1,3,3,3-pentafluoro- (6CI, 7CI, 8CI)  
OTHER NAMES:  
CN **1,1,1,3,3-Pentafluoropropene**  
CN 1,1,3,3,3-Pentafluoro-1-propene  
CN **1,1,3,3,3-Pentafluoropropene**  
CN 1,1,3,3,3-Pentafluoropropylene  
CN 2-Hydropentafluoropropylene  
CN **2H-Pentafluoropropene**  
CN HFC 1225zc  
MF **C3 H F5**  
CI COM  
LC STN Files: BEILSTEIN\*, CA, CAOLD, CAPLUS, CASREACT, CHEMCATS,  
CHEMINFORMRX, CHEMLIST, CSCHEM, GMELIN\*, IFICDB, IFIUDB, MSDS-OHS,  
SPECINFO, TOXCENTER, USPAT2, USPATFULL  
(\*File contains numerically searchable property data)  
Other Sources: EINECS\*\*, TSCA\*\*  
(\*Enter CHEMLIST File for up-to-date regulatory information)  
DT.CA CAplus document type: Book; Conference; Journal; Patent  
RL.P Roles from patents: ANST (Analytical study); FORM (Formation,  
nonpreparative); PREP (Preparation); PROC (Process); PRP (Properties);  
RACT (Reactant or reagent); USES (Uses); NORL (No role in record)  
RL.NP Roles from non-patents: ANST (Analytical study); FORM (Formation,  
nonpreparative); PREP (Preparation); PROC (Process); PRP (Properties);  
RACT (Reactant or reagent); NORL (No role in record)



=> s l11 and (azeotrope or azeotropic)  
10470 AZEOTROPE  
19266 AZEOTROPIC  
L12 10 L11 AND (AZEOTROPE OR AZEOTROPIC)

=> d 1-10

L12 ANSWER 1 OF 10 USPATFULL on STN  
AN 2002:236321 USPATFULL  
TI Production of 1,2-dihydro and 2,2-dihydro hexafluoropropanes and  
azeotropes thereof with HF  
IN Rao, Velliyur Nott Mallikarjuna, Wilmington, DE, UNITED STATES  
Walczak, Francis John, New Castle, DE, UNITED STATES  
PI US 2002128526 A1 20020912  
US 6472574 B2 20021029  
AI US 2002-96295 A1 20020311 (10)  
RLI Division of Ser. No. US 1999-445742, filed on 10 Dec 1999, GRANTED, Pat.  
No. US 6388147 A 371 of International Ser. No. WO 1995-US5862, filed on  
19 May 1995, UNKNOWN  
DT Utility  
FS APPLICATION  
LN.CNT 593  
INCL INCLM: 570/166.000  
NCL NCLM: 570/164.000  
NCLS: 570/166.000; 570/168.000; 570/172.000  
IC [7]  
ICM: C07C019-08  
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L12 ANSWER 2 OF 10 USPATFULL on STN  
AN 2002:214502 USPATFULL  
TI Process for the manufacture of 1,1,1,3,3-pentafluoropropene,  
2-chloro-pentafluoropropene and compositions comprising saturated  
derivatives  
IN Manogue, William H., Newark, DE, UNITED STATES  
Rao, V.N. Mallikarjuna, Wilmington, DE, UNITED STATES  
Sievert, Allen Capron, Elkton, MD, UNITED STATES  
Swearingen, Steven H., Wilmington, DE, UNITED STATES  
PI US 2002115895 A1 20020822  
US 6548720 B2 20030415  
AI US 2002-61002 A1 20020130 (10)  
RLI Division of Ser. No. US 1999-367900, filed on 19 Aug 1999, PATENTED A  
371 of International Ser. No. WO 1998-US3132, filed on 18 Feb 1998,  
UNKNOWN  
PRAI US 1997-56795P 19970825 (60)  
US 1997-49723P 19970616 (60)  
US 1997-38430P 19970219 (60)  
DT Utility  
FS APPLICATION  
LN.CNT 1074  
INCL INCLM: 570/156.000  
NCL NCLM: 570/157.000  
NCLS: 203/067.000; 570/165.000; 570/166.000; 570/176.000  
IC [7]  
ICM: C07C017-25  
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L12 ANSWER 3 OF 10 USPATFULL on STN  
AN 2002:109231 USPATFULL  
TI Production of 1,2-dihydro and 2,2-dihydro hexafluoropropanes and  
azeotropes thereof with HF  
IN Rao, Velliyur Nott Mallikarjuna, Wilmington, DE, United States  
Walczak, Francis John, New Castle, DE, United States

PA E. I. du Pont de Nemours and Company, Wilmington, DE, United States  
(U.S. corporation)  
PI US 6388147 B1 20020514  
WO 9532935 19951207  
AI US 1999-445742 19991210 (9)  
WO 1995-US5862 19950519  
19991210 PCT 371 date  
RLI Continuation of Ser. No. US 1994-249405, filed on 26 May 1994, now  
patented, Pat. No. US 5563304  
DT Utility  
FS GRANTED  
LN.CNT 551  
INCL INCLM: 570/166.000  
INCLS: 570/176.000  
NCL NCLM: 570/166.000  
NCLS: 570/176.000  
IC [7]  
ICM: C07C017-08  
EXF 570/157; 570/165; 570/166; 570/176; 570/177; 203/67  
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L12 ANSWER 4 OF 10 USPATFULL on STN  
AN 2002:61464 USPATFULL  
TI PROCESSES FOR THE MANUFACTURE OF 1,1,1,3,3- PENTAFLUOROPROPENE,  
2-CHLORO-PENTAFLUOROPROPENE AND COMPOSITIONS COMPRISING SATURATED  
DERIVATIVES THEREOF  
IN RAO, V.N. MALLIKARJUNA, WILMINGTON, DE, UNITED STATES  
SIEVERT, ALLEN CAPRON, ELKTON, MD, UNITED STATES  
PI US 2002035300 A1 20020321  
US 6376727 B2 20020423  
AI US 1999-367900 A1 19990819 (9)  
WO 1998-US3132 19980218  
DT Utility  
FS APPLICATION  
LN.CNT 1066  
INCL INCLM: 570/156.000  
INCLS: 570/123.000; 570/155.000; 570/157.000; 570/124.000; 570/204.000;  
570/177.000; 570/178.000  
NCL NCLM: 570/157.000  
NCLS: 203/067.000; 570/165.000; 570/166.000; 570/168.000; 570/176.000  
IC [7]  
ICM: C07C017-00  
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L12 ANSWER 5 OF 10 USPATFULL on STN  
AN 2001:235356 USPATFULL  
TI Process for perfluorocyclobutane purification  
IN Malikarjuna, V. N., Wilmington, DE, United States  
PA E. I. du Pont de Nemours and Company, Wilmington, DE, United States  
(U.S. corporation)  
PI US 6333440 B1 20011225  
AI US 2001-825748 20010404 (9)  
DT Utility  
FS GRANTED  
LN.CNT 595  
INCL INCLM: 570/178.000  
INCLS: 570/177.000  
NCL NCLM: 570/178.000  
NCLS: 570/177.000  
IC [7]  
ICM: C07C017-38  
EXF 570/177; 570/178  
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L12 ANSWER 6 OF 10 USPATFULL on STN  
 AN 2000:95158 USPATFULL  
 TI Process for the manufacture of 1,1,1,3,3-pentafluoropropane  
 IN Nappa, Mario Joseph, Newark, DE, United States  
 Rao, V. N. Mallikarjuna, Wilmington, DE, United States  
 Sievert, Allen Capron, Elkton, MD, United States  
 PA E. I. du Pont de Nemours and Company, Wilmington, DE, United States  
 (U.S. corporation)  
 PI US 6093859 20000725  
 AI US 1999-323736 19990601 (9)  
 RLI Continuation of Ser. No. US 1998-5400, filed on 9 Jan 1998, now  
 patented, Pat. No. US 5945573  
 PRAI US 1997-36328P 19970131 (60)  
 DT Utility  
 FS Granted  
 LN.CNT 632  
 INCL INCLM: 570/175.000  
 INCLS: 570/176.000; 570/156.000; 570/157.000; 570/158.000  
 NCL NCLM: 570/175.000  
 NCLS: 570/156.000; 570/157.000; 570/158.000; 570/176.000  
 IC [7]  
 ICM: C07C019-08  
 ICS: C07C017-25  
 EXF 570/175; 570/176; 570/156; 570/157; 570/158  
 CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L12 ANSWER 7 OF 10 USPATFULL on STN  
 AN 1999:102962 USPATFULL  
 TI Process for the manufacture of 1,1,1,3,3-pentafluoropropane  
 IN Nappa, Mario Joseph, Newark, DE, United States  
 Rao, V. N. Mallikarjuna, Wilmington, DE, United States  
 Sievert, Allen Capron, Elkton, MD, United States  
 PA E. I. du Pont de Nemours and Company, Wilmington, DE, United States  
 (U.S. corporation)  
 PI US 5945573 19990831  
 AI US 1998-5400 19980109 (9)  
 PRAI US 1997-36328P 19970131 (60)  
 DT Utility  
 FS Granted  
 LN.CNT 642  
 INCL INCLM: 570/175.000  
 INCLS: 570/176.000; 570/156.000; 570/157.000  
 NCL NCLM: 570/175.000  
 NCLS: 570/156.000; 570/157.000; 570/176.000  
 IC [6]  
 ICM: C07C019-08  
 ICS: C07C017-34  
 EXF 570/175; 570/176; 570/156; 570/159  
 CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L12 ANSWER 8 OF 10 USPATFULL on STN  
 AN 97:97060 USPATFULL  
 TI Method for manufacturing 1,1,1,2,3-pentafluoropropene  
 1,1,1,2,3-pentafluoropropane  
 IN Aoyama, Hirokazu, Settsu, Japan  
 Seki, Eiji, Settsu, Japan  
 PA Daikin Industries, Ltd., Osaka, Japan (non-U.S. corporation)  
 PI US 5679875 19971021  
 WO 9325510 19931223  
 AI US 1994-338528 19941130 (8)  
 WO 1993-JP661 19930519  
 19941130 PCT 371 date  
 19941130 PCT 102(e) date  
 PRAI JP 1992-171949 19920605

JP 1992-179106 19920612  
JP 1992-262865 19920904  
JP 1992-262866 19920904  
JP 1992-360966 19921229

DT Utility

FS Granted

LN.CNT 862

INCL INCLM: 570/156.000

INCLS: 570/157.000; 570/158.000; 570/175.000

NCL NCLM: 570/156.000

NCLS: 570/157.000; 570/158.000; 570/175.000

IC [6]

ICM: C07C021-18

ICS: C07C019-08

EXF 570/156; 570/157; 570/158; 570/175

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L12 ANSWER 9 OF 10 USPATFULL on STN

AN 96:92220 USPATFULL

TI Production of 1,2-dihydro and 2,2-dihydro hexafluoropropanes and azeotropes thereof with HF

IN Rao, V. N. Mallikarjuna, Wilmington, DE, United States

Walczak, Francis J., New Castle, DE, United States

PA E. I. Du Pont de Nemours and Company, Wilmington, DE, United States  
(U.S. corporation)

PI US 5563304 19961008

AI US 1994-249405 19940526 (8)

DT Utility

FS Granted

LN.CNT 558

INCL INCLM: 570/166.000

INCLS: 570/168.000; 570/169.000

NCL NCLM: 570/166.000

NCLS: 570/168.000; 570/169.000

IC [6]

ICM: C07C017-08

EXF 570/169; 570/166; 570/168

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L12 ANSWER 10 OF 10 USPATFULL on STN

AN 95:20889 USPATFULL

TI Process for the manufacture of 1,1,1,2,3,-pentafluoropropane

IN Nappa, Mario J., Newark, DE, United States

Rao, V. N. Mallikarjuna, Wilmington, DE, United States

PA E. I. Du Pont de Nemours and Company, Wilmington, DE, United States  
(U.S. corporation)

PI US 5396000 19950307

AI US 1993-66451 19930524 (8)

DT Utility

FS Granted

LN.CNT 307

INCL INCLM: 870/175.000

INCLS: 570/156.000; 570/157.000

NCL NCLM: 570/175.000

NCLS: 570/156.000; 570/157.000

IC [6]

ICM: C07C019-08

ICS: C07C017-34

EXF 570/156; 570/175; 570/176; 570/159

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

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(FILE 'HOME' ENTERED AT 10:32:32 ON 07 JUL 2004)

FILE 'CAPLUS' ENTERED AT 10:32:46 ON 07 JUL 2004

FILE 'CAPLUS' ENTERED AT 10:33:01 ON 07 JUL 2004

FILE 'REGISTRY' ENTERED AT 10:33:05 ON 07 JUL 2004

L1	0 S HFO 1225
L2	0 S HFO-1225
L3	26 S PENTAFLUOROPROPENE
L4	0 S L3 AND 1225
L5	0 S L3 AND NC=1 AND CL=0
L6	541 S LC AND NC=1
L7	20 S L3 AND NC=1
L8	11 S L7 AND C=3 AND F=5
L9	0 S L8 AND CL=0
L10	5 S L8 AND H=1

FILE 'USPATFULL' ENTERED AT 10:39:25 ON 07 JUL 2004

L11	55 S L10
L12	10 S L11 AND (AZEOTROPE OR AZEOTROPIC)



L Number	Hits	Search Text	DB	Time stamp
1	143	(("19911126") or ("5068473") or ("19920908") or ("5146018") or ("19930706") or ("5225576") or ("19930810") or ("5235074") or ("19950307") or ("5396000") or ("19950530") or ("5420368") or ("19951212") or ("5475169") or ("19960514") or ("5516946") or ("19940217") or ("9403414") or ("19960618") or ("5527960") or ("19961008") or ("5563304") or ("19961112") or ("5573654") or ("19970114") or ("5594159") or ("19970930") or ("5672767") or ("19931223") or ("9325510") or ("19971021") or ("5679875") or ("19941222") or ("9429251") or ("19980203") or ("5714654") or ("19980303") or ("5723630") or ("19980317") or ("5728902") or ("19961017") or ("9632364") or ("19990608") or ("5910615") or ("19990831") or ("5945573") or ("19961024") or ("9633153") or ("19990928") or ("5959165") or ("19991123") or ("5989998") or ("19991123") or ("5990373") or ("20000229") or ("6031141") or ("20000620") or ("6076372") or ("20000725") or ("6093859") or ("20000801") or ("6096932") or ("19970605") or ("9719751") or ("20001003") or ("6127585") or ("20001114") or ("6147268") or ("20001205") or ("6156943") or ("20010626") or ("6252099") or ("20011106") or ("6313359") or ("20020820") or ("6437202") or ("20011129") or ("20011213") or ("20011225") or ("6333440") or ("20021105") or ("6476281") or ("20020103") or ("20030506") or ("6558756") or ("20020110") or ("20020423") or ("6376727") or ("20020321") or ("19980806") or ("9833755") or ("20020409") or ("6369284") or ("19951207") or ("9532935") or ("20020514") or ("6388147") or ("20030218") or ("6521461") or ("20020530") or ("20020730") or ("6426019") or ("20030415") or ("6548720") or ("20020822") or ("20021029") or ("6472574") or ("20020912") or ("20030327") or ("20030415") or ("6548719") or ("20030327") or ("20030624") or ("6583328") or ("20030805") or ("6602434") or ("20030821") or ("20031216") or ("6664338") or ("20031002") or ("20031030") or ("20031113") or ("20040106") or ("6673976") or ("20040122") or ("20010301") or ("20040309") or ("6703533") or ("20040513")).PN.	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2004/07/07 10:41

2	12	(((("19911126") or ("5068473") or ("19920908") or ("5146018") or ("19930706") or ("5225576") or ("19930810") or ("5235074") or ("19950307") or ("5396000") or ("19950530") or ("5420368") or ("19951212") or ("5475169") or ("19960514") or ("5516946") or ("19940217") or ("9403414") or ("19960618") or ("5527960") or ("19961008") or ("5563304") or ("19961112") or ("5573654") or ("19970114") or ("5594159") or ("19970930") or ("5672767") or ("19931223") or ("9325510") or ("19971021") or ("5679875") or ("19941222") or ("9429251") or ("19980203") or ("5714654") or ("19980303") or ("5723630") or ("19980317") or ("5728902") or ("19961017") or ("9632364") or ("19990608") or ("5910615") or ("19990831") or ("5945573") or ("19961024") or ("9633153") or ("19990928") or ("5959165") or ("19991123") or ("5989998") or ("19991123") or ("5990373") or ("20000229") or ("6031141") or ("20000620") or ("6076372") or ("20000725") or ("6093859") or ("20000801") or ("6096932") or ("19970605") or ("9719751") or ("20001003") or ("6127585") or ("20001114") or ("6147268") or ("20001205") or ("6156943") or ("20010626") or ("6252099") or ("20011106") or ("6313359") or ("20020820") or ("6437202") or ("20011129") or ("20011213") or ("20011225") or ("6333440") or ("20021105") or ("6476281") or ("20020103") or ("20030506") or ("6558756") or ("20020110") or ("20020423") or ("6376727") or ("20020321") or ("19980806") or ("9833755") or ("20020409") or ("6369284") or ("19951207") or ("9532935") or ("20020514") or ("6388147") or ("20030218") or ("6521461") or ("20020530") or ("20020730") or ("6426019") or ("20030415") or ("6548720") or ("20020822") or ("20021029") or ("6472574") or ("20020912") or ("20030327") or ("20030415") or ("6548719") or ("20030327") or ("20030624") or ("6583328") or ("20030805") or ("6602434") or ("20030821") or ("20031216") or ("6664338") or ("20031002") or ("20031030") or ("20031113") or ("20040106") or ("6673976") or ("20040122") or ("20010301") or ("20040309") or ("6703533") or ("20040513")).PN.) and (azeotrope or azeotropic or distill or 510/\$.ccls.)	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2004/07/07 10:46
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3	0	(((("19911126") or ("5068473") or ("19920908") or ("5146018") or ("19930706") or ("5225576") or ("19930810") or ("5235074") or ("19950307") or ("5396000") or ("19950530") or ("5420368") or ("19951212") or ("5475169") or ("19960514") or ("5516946") or ("19940217") or ("9403414") or ("19960618") or ("5527960") or ("19961008") or ("5563304") or ("19961112") or ("5573654") or ("19970114") or ("5594159") or ("19970930") or ("5672767") or ("19931223") or ("9325510") or ("19971021") or ("5679875") or ("19941222") or ("9429251") or ("19980203") or ("5714654") or ("19980303") or ("5723630") or ("19980317") or ("5728902") or ("19961017") or ("9632364") or ("19990608") or ("5910615") or ("19990831") or ("5945573") or ("19961024") or ("9633153") or ("19990928") or ("5959165") or ("19991123") or ("5989998") or ("19991123") or ("5990373") or ("20000229") or ("6031141") or ("20000620") or ("6076372") or ("20000725") or ("6093859") or ("20000801") or ("6096932") or ("19970605") or ("9719751") or ("20001003") or ("6127585") or ("20001114") or ("6147268") or ("20001205") or ("6156943") or ("20010626") or ("6252099") or ("20011106") or ("6313359") or ("20020820") or ("6437202") or ("20011129") or ("20011213") or ("20011225") or ("6333440") or ("20021105") or ("6476281") or ("20020103") or ("20030506") or ("6558756") or ("20020110") or ("20020423") or ("6376727") or ("20020321") or ("19980806") or ("9833755") or ("20020409") or ("6369284") or ("19951207") or ("9532935") or ("20020514") or ("6388147") or ("20030218") or ("6521461") or ("20020530") or ("20020730") or ("6426019") or ("20030415") or ("6548720") or ("20020822") or ("20021029") or ("6472574") or ("20020912") or ("20030327") or ("20030415") or ("6548719") or ("20030327") or ("20030624") or ("6583328") or ("20030805") or ("6602434") or ("20030821") or ("20031216") or ("6664338") or ("20031002") or ("20031030") or ("20031113") or ("20040106") or ("6673976") or ("20040122") or ("20010301") or ("20040309") or ("6703533") or ("20040513")).PN.) and (azeotrope or azeotropic or distill or 510/\$.ccls.)) and (HFO-1243zf or HFC-152a or HFC-1234ze or trifluoropropene or difluoroethane or tetrafluoropropene or (HFO adj 1243zf) or (HFC adj 152a) or (HFC adj 1234ze) or HFO1243zf or HFC152a or HFC1234ze).ti,ab,clm.	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2004/07/07 10:46
4	362	pentafluoropropene	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2004/07/07 10:57
5	6	((("6176102") or ("5683978") or ("5171902") or ("5504265") or ("6506950") or ("6327866")).PN.	USPAT	2004/07/07 10:51
6	6	pentafluoropropene and (((("6176102") or ("5683978") or ("5171902") or ("5504265") or ("6506950") or ("6327866")).PN.)	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2004/07/07 10:51
7	110	pentafluoropropene and @RLAD<20021025	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2004/07/07 10:54
-	5	((HFO-1225 or (HFO adj "1225") or pentafluoropropene or HFO1225) and (HFO-1243zf or HFC-152a or HFC-1234ze or trifluoropropene or difluoroethane or tetrafluoropropene or (HFO adj 1243zf) or (HFC adj 152a) or (HFC adj 1234ze) or HFO1243zf or HFC152a or HFC1234ze) and (azeotropic or azeotrope))	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2004/07/06 16:36
-	362	pentafluoropropene	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2004/07/07 10:48
-	20	pentafluoropropene and (azeotrope or azeotropic)	USPAT	2004/07/06 17:19

-	93	((("6176102") or ("5171902") or ("5683978") or ("5504265") or ("6506950") or ("6327866") or ("5268122") or ("5723701") or ("6194619") or ("5091104") or ("4997589") or ("5182042") or ("5221361") or ("5026498") or ("5211866") or ("5417871") or ("5785883") or ("5073290") or ("5785883") or ("5182040") or ("5968406") or ("5725791") or ("5968406") or ("6673259") or ("5076956") or ("5073288") or ("5096933") or ("5135676") or ("5433880") or ("5562861") or ("5284596") or ("6500359") or ("5262077") or ("5227088") or ("6641752") or ("6261472") or ("5672293") or ("4954289") or ("6001273") or ("4510064") or ("5605882") or ("5441659") or ("6117356") or ("6187729") or ("5106527") or ("4303536") or ("6121337") or ("4873021") or ("5176757") or ("5102557"))).PN.	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2004/07/06 17:19
-	48	((("6176102") or ("5171902") or ("5683978") or ("5504265") or ("6506950") or ("6327866") or ("5268122") or ("5723701") or ("6194619") or ("5091104") or ("4997589") or ("5182042") or ("5221361") or ("5026498") or ("5211866") or ("5417871") or ("5785883") or ("5073290") or ("5785883") or ("5182040") or ("5968406") or ("5725791") or ("5968406") or ("6673259") or ("5076956") or ("5073288") or ("5096933") or ("5135676") or ("5433880") or ("5562861") or ("5284596") or ("6500359") or ("5262077") or ("5227088") or ("6641752") or ("6261472") or ("5672293") or ("4954289") or ("6001273") or ("4510064") or ("5605882") or ("5441659") or ("6117356") or ("6187729") or ("5106527") or ("4303536") or ("6121337") or ("4873021") or ("5176757") or ("5102557"))).PN.	USPAT	2004/07/06 17:20
-	9	pentafluoropropene and (((("6176102") or ("5171902") or ("5683978") or ("5504265") or ("6506950") or ("6327866") or ("5268122") or ("5723701") or ("6194619") or ("5091104") or ("4997589") or ("5182042") or ("5221361") or ("5026498") or ("5211866") or ("5417871") or ("5785883") or ("5073290") or ("5785883") or ("5182040") or ("5968406") or ("5725791") or ("5968406") or ("6673259") or ("5076956") or ("5073288") or ("5096933") or ("5135676") or ("5433880") or ("5562861") or ("5284596") or ("6500359") or ("5262077") or ("5227088") or ("6641752") or ("6261472") or ("5672293") or ("4954289") or ("6001273") or ("4510064") or ("5605882") or ("5441659") or ("6117356") or ("6187729") or ("5106527") or ("4303536") or ("6121337") or ("4873021") or ("5176757") or ("5102557"))).PN.)	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2004/07/06 17:21
-	59	(pentafluoropropene and (azeotrope or azeotropic)) or (((("6176102") or ("5171902") or ("5683978") or ("5504265") or ("6506950") or ("6327866") or ("5268122") or ("5723701") or ("6194619") or ("5091104") or ("4997589") or ("5182042") or ("5221361") or ("5026498") or ("5211866") or ("5417871") or ("5785883") or ("5073290") or ("5785883") or ("5182040") or ("5968406") or ("5725791") or ("5968406") or ("6673259") or ("5076956") or ("5073288") or ("5096933") or ("5135676") or ("5433880") or ("5562861") or ("5284596") or ("6500359") or ("5262077") or ("5227088") or ("6641752") or ("6261472") or ("5672293") or ("4954289") or ("6001273") or ("4510064") or ("5605882") or ("5441659") or ("6117356") or ("6187729") or ("5106527") or ("4303536") or ("6121337") or ("4873021") or ("5176757") or ("5102557"))).PN.)	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2004/07/07 10:40